From:

Johnson, Chris <chris.johnson@ncdenr.gov>

Sent:

Monday, July 03, 2017 4:04 PM

To:

Perez, Helen I; West, Steve; Gregson, Jim

Cc:

Strynar, Mark

Subject:

EPA samples for this week

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### **Chris Johnson**

Environmental Program Supervisor Water Sciences Section / Organic Chemistry Branch

North Carolina Department of Environmental Quality Division of Water Resources

919-733-3908 office

4405 Reedy Creek Road Raleigh, NC 27607

From:

Johnson, Chris <chris.johnson@ncdenr.gov>

Sent:

Thursday, July 06, 2017 1:50 PM

To:

Strynar, Mark

Subject:

FW: Sample Analysis - Chemours Fayetteville, NC

Mark, did I respond sufficiently to the inquiry below? I didn't want to pull you into the email string. Thanks.

Chris Johnson NC DEQ-DWR

Water Sciences Section

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From: Johnson, Chris

Sent: Thursday, July 06, 2017 1:49 PM

To: 'JOHNSON, MICHAEL E' < MICHAEL.E.JOHNSON@chemours.com>

Subject: RE: Sample Analysis - Chemours Fayetteville, NC

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Sent: Thursday, July 06, 2017 12:54 PM

To: Johnson, Chris <chris.johnson@ncdenr.gov>

Subject: RE: Sample Analysis - Chemours Fayetteville, NC

Hi Chris.

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- 1. Was the trip blank spiked with anything?
- 2. Was the spike blank spiked with anything except the C3 acid dimer?

Thanks!

### Mike

Michael E. Johnson, PE Environmental Manager Chemours Company – Fayetteville Works (910) 678-1155



The Chemours Company FC, LLC 22828 NC Highway 87 W Fayetteville, NC 28306-7332

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From:

Strynar, Mark

Sent:

Thursday, July 06, 2017 4:09 PM

To:

Medina-Vera, Myriam; Buckley, Timothy

Cc: Subject:

McCord, James FW: Sampling

FYI,

I just got off of a call with Chris Johnson. It seems the NCDEQ people would like to do one more round of sampling per a request from Chemours. It seems that in the Week one sampling they were surprised by the high results. That would mean a week 4 sampling excursion mid to late next week at both Fayetteville and Wilmington locations. I told him we could handle the capacity but I would be away and those results may be delayed. I think James can handle it but I wanted to let you know. I don't see any reason why we cannot do these samples. It is still below the 50 we agreed we could do. I think we can still hit the deadline for the Week1-3 samples. Not sure about week number 4.

Thus I need to give Chris QC samples for Test America and for our efforts when he arrives tomorrow.

I will come to chat with you.

Mark

From: Johnson, Chris [mailto:chris.johnson@ncdenr.gov]

Sent: Thursday, July 06, 2017 3:02 PM
To: Strynar, Mark < Strynar.Mark@epa.gov>

Subject: Sampling

Mark, I just finished a call with Linda Culpepper and the Supervisors of the Fayetteville and Wilmington regional offices. We want to do one more sampling event for the Fayetteville sites (three sites) next week on Wednesday or Thursday. This is to get another result for the upstream sample since it was only done in weeks 2 and 3. Is that doable from your end? If so, we would need another set of the QC samples if you so desire. Samples will also be going to TestAmerica once again, so we would need a QC set for them as well. We have additional sample containers available from the set you provided, so we won't need those this time. Let me know if all this is acceptable for your laboratory. Thanks.

#### Chris Johnson

Environmental Program Supervisor Water Sciences Section / Organic Chemistry Branch

North Carolina Department of Environmental Quality Division of Water Resources

919-733-3908 office

4405 Reedy Creek Road Raleigh, NC 27607

From:

Strynar, Mark

Sent:

Thursday, June 29, 2017 1:08 PM

To:

Medina-Vera, Myriam; Buckley, Timothy; Tong-Argao, Sania

Cc:

McCord, James; Newton, Seth; Lang, Johnsie

Subject:

NC DEQ samples update

### Here is an update on NC DEQ samples:

1) Week 1 sample event water has been processed and should be put on the UPLC-MS/MS tonight.

- 2) Week 2 samples have not yet been received. They samples are due to the NC DEQ office in Raleigh via courier today. They are set to be delivered to our lab next Monday July 3<sup>rd</sup> for analysis.
- 3) Week 3 samples are set to be collected on July 3<sup>rd</sup> (Fayetteville area) and July 6<sup>th</sup> (Wilmington area). I asked Chris Johnson to get those samples to us asap due to a pending family vacation I have on July 11-20<sup>th</sup>.
- 4) QA/QC samples that were prepared last week for Week 2 sampling are going to come back in the Week 2 sampling event to EPA; a second QA/QC set I prepared is currently in route to Test America.
- 5) Blind QA/QC samples were prepared by a 3<sup>rd</sup> independent party (Adam Swank NHEERL) to be included in the Week 3 sampling. Common QA/QC samples will both go to Test America and come back to the EPA. Chris Johnson and his QA Manager just left with these QA/QC samples and additional empty bottles for the Week 3 sampling event.
- 6) Sania has been doing some technical audits of the SOP being performed and observed. She will be getting me comments to include in our SOP for this analysis. The QA staff deemed a separate QAPP rather than an addendum was needed for this project. I am working toward completing this in between analysis.
- 7) The complete method validation of GenX (and 4 other PFECAs) has been done (thanks to James McCord, Seth Newton and Johnsie Lang) and the samples are also set to be injected on the UPLC-MS/MS tonight. This info will be added to the SOP as performance criteria in tap water, waste water and surface water.

I may have forgotten something but that is my recollection of where we are right now. Thanks,

Mark

Dr. Mark J. Strynar
Physical Scientist
US EPA
National Exposure Research Laboratory
919-541-3706
Strynar.mark@epa.gov

From:

Johnson, Chris <chris.johnson@ncdenr.gov>

Sent:

Monday, July 03, 2017 4:48 PM

To:

Strynar, Mark; Perez, Helen I; West, Steve; Gregson, Jim

Subject:

RE: EPA samples for this week

Thanks for the update, Mark.

Chris Johnson NC DEQ-DWR Water Sciences Section

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From: Strynar, Mark [mailto:Strynar.Mark@epa.gov]

Sent: Monday, July 03, 2017 4:41 PM

To: Johnson, Chris <chris.johnson@ncdenr.gov>; Perez, Helen I <helen.perez@ncdenr.gov>; West, Steve

<steve.west@ncdenr.gov>; Gregson, Jim <jim.gregson@ncdenr.gov>

Subject: RE: EPA samples for this week

FYI,

We just got week #2 samples on our UPLC-MS/MS. Should have that data by Wednesday. Many samples exceeded our calibration curve of 250 ng/L from week 1. We had to dilute most 5x and the Chemours outfall 20x for analysis.

We will keep you updated. Have a safe holiday.

Mark

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Cc: Strynar, Mark < <a href="mailto:Strynar.Mark@epa.gov">Strynar, Mark@epa.gov</a>>

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North Carolina Department of Environmental Quality Division of Water Resources

919-733-3908 office

4405 Reedy Creek Road Raleigh, NC 27607

From:

Lindstrom, Andrew

Sent:

Friday, June 30, 2017 9:06 AM

To:

Maddaloni, Mark; Buckley, Timothy; Strynar, Mark

Subject: Attachments: RE: PFAS in Cape Fear Drinking Water NC / R4 / NERL Collaboration

Resnik & Wing 2007.pdf

Tim,

Following up on Mark's comment here, I think we (EPA) need to quickly find out if OW is working on an HA for GenX and at least go public with the fact that they are/are not working on it. OW should be issuing a statement on this.

We need to take charge of the narrative. Did we learn anything form CHEERS?

Also, I think we need to participate win public briefings where we – the authors of the Sun et al. paper - answer questions with NC DEQ and other appropriate policy folks. If we don't do what we can to work with this community on this issue we will lose the trust of the people we serve.

I know we (at the NERL level) may not have much influence on these things. I'd just like to hear my management say the right thing.

Please let me know if I can help in any way.

Thank you,

Andy

From: Maddaloni, Mark

Sent: Friday, June 30, 2017 8:42 AM

**To:** Buckley, Timothy <Buckley.Timothy@epa.gov>; Strynar, Mark <Strynar.Mark@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>; Medina-Vera, Myriam <Medina-Vera.Myriam@epa.gov>; Sivertsen, Scott

<Sivertsen.Scott@epa.gov>; Johnson, Chris <chris.johnson@ncdenr.gov>; Allenbach, Becky

<Allenbach.Becky@epa.gov>; linda.culpepper@ncdenr.gov; helen.perez@ncdenr.gov; nick.jones@ncdenr.gov; cyndi.karoly@ncdenr.gov; dana.satterwhite@ncdenr.gov; mark.brantley@ncdenr.gov; morella.sanchez-king@ncdenr.gov; Hall, Renea <Hall.Renea@epa.gov>; France, Danny <France.Danny@epa.gov>; Risen, Amy J <Amy.Risen@dhhs.nc.gov>; Shehee, Mina <mina.shehee@dhhs.nc.gov>; Langley, Rick <rick.langley@dhhs.nc.gov>; Sink, Marla <Marla.Sink@ncdenr.gov>; Munger, Bridget <bri>bridget.munger@ncdenr.gov>; Smith, Emily J.

<Smith.Emily@epa.gov>; Newton, Seth <Newton.Seth@epa.gov>; Maguire, Megan <Maguire.Megan@epa.gov>; Tong-Argao, Sania <Tong-Argao.Sania@epa.gov>

Cc: Hubbard, Carolyn < Hubbard. Carolyn@epa.gov>; Gregson, Jim < jim.gregson@ncdenr.gov>

Subject: RE: PFAS in Cape Fear Drinking Water NC / R4 / NERL Collaboration

Thanks, Tim. Will the "Communications Plan" include a discussion of health-based benchmarks for GenX in drinking water to compare sampling results against?

----Original Appointment----

From: Buckley, Timothy

Sent: Thursday, June 29, 2017 5:14 PM

To: Strynar, Mark; Lindstrom, Andrew; Medina-Vera, Myriam; Sivertsen, Scott; Johnson, Chris; Allenbach, Becky;

<u>linda.culpepper@ncdenr.gov; helen.perez@ncdenr.gov; nick.jones@ncdenr.gov; cyndi.karoly@ncdenr.gov; dana.satterwhite@ncdenr.gov; mark.brantley@ncdenr.gov; morella.sanchez-king@ncdenr.gov; Maddaloni, Mark; Hall, </u>

Renea; France, Danny; Risen, Amy J; Shehee, Mina; Langley, Rick; Sink, Marla; Munger, Bridget; Smith, Emily J.; Newton,

Seth; Maguire, Megan; Tong-Argao, Sania Cc: Hubbard, Carolyn; Gregson, Jim

Subject: PFAS in Cape Fear Drinking Water NC / R4 / NERL Collaboration

When: Wednesday, July 05, 2017 2:30 PM-3:30 PM (UTC-05:00) Eastern Time (US & Canada).

Where:

Feel free to offer additional agenda items if I have left something important out.

### Agenda

- Sampling Update
  - Addition of Fayetteville
  - Samples delivered
  - o Samples analyzed
  - o Incorporation of performance standards
  - Extending the sampling period
- QAPP Progress
  - Sampling
  - Laboratory
- Results status
- Communications Plan Status
- Scheduling next meeting

Notes / Follow-up from Linda Culpepper following 6/27 conference call

Follow up items from today's conf. call:

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  making arrangements in advance.
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the EPA TSCA inspectors could/would take production process samplings. Wanted to give you a heads up about our conversation.

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Sent:

Thursday, July 06, 2017 2:16 PM

To:

Strynar, Mark

Subject:

RE: Sample Analysis - Chemours Fayetteville, NC

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Chris Johnson NC DEQ-DWR Water Sciences Section

Trater describes dection

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The Chemours Company FC, LLC 22828 NC Highway 87 W Fayetteville, NC 28306-7332

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https://www.chemours.com/Chemours Home/en US/email disclaimer.html

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Thursday, July 06, 2017 2:00 PM

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Subject:

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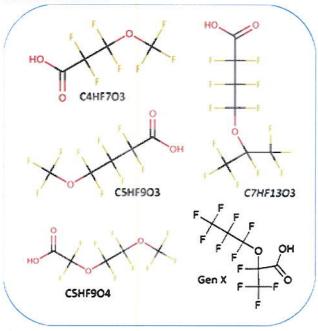
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Mike

Michael E. Johnson, PE Environmental Manager Chemours Company – Fayetteville Works (910) 678-1155



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From:

Johnson, Chris <chris.johnson@ncdenr.gov>

Sent:

Thursday, June 29, 2017 3:08 PM

To:

Perez, Helen I

Cc: Subject: Huffman, David J; Satterwhite, Dana; Strynar, Mark RE: Sampling at International Paper raw intake

Acknowledged. Thanks, Helen.

Chris Johnson NC DEQ-DWR Water Sciences Section

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From: Perez, Helen I

Sent: Thursday, June 29, 2017 2:28 PM

To: Johnson, Chris <chris.johnson@ncdenr.gov>
Subject: Sampling at International Paper raw intake

Chris,

Wanted to explain our procedure at International Paper raw sample site. We used their sampling pole (NASCO) with a clean wide-mouthed HDPE liter bottle at the end to use as a primary sampler. We rinsed the primary sampler three times with sample water before use. We also rinsed the sample bottles three times with sample water before the final sample was retained.

#### Helen Perez

Environmental Specialist
Water Quality Regional Operations Section
Division of Water Resources
Department of Environmental Quality

910-796-7215 Reception Desk 910-796-7323 Direct 910-350-2004 Fax helen.perez@ncdenr.gov

## Wilmington Regional Office

127 Cardinal Drive Extension Wilmington, NC 28405

From:

Strynar, Mark

Sent:

Thursday, July 06, 2017 4:22 PM

To:

Buckley, Timothy; Medina-Vera, Myriam

Cc: Subject: McCord, James RE: Sampling

Not on my comments. Apparently Test America results were given to Chemours and they were surprised.

Mark

From: Buckley, Timothy

Sent: Thursday, July 06, 2017 4:19 PM

To: Strynar, Mark <Strynar.Mark@epa.gov>; Medina-Vera, Myriam <Medina-Vera.Myriam@epa.gov>

Cc: McCord, James <mccord.james@epa.gov>

Subject: RE: Sampling

Is he basing "high" levels on your comments or have they seen Test America results. Either way, I agree that we can accommodate. We need to talk about timeline and whether we report in batches.

Tim

Timothy J. Buckley, PhD
Director of the Exposure Methods & Measurements Division
National Exposure Research Laboratory
109 TW Alexander Drive
Research Triangle Park, NC 27711

Email: buckley.timothy@epa.gov

URL: http://www.epa.gov/heasd/staff/buckley.html

Phone: (919) 541-2454 (O); FAX: -0239

(919) 308-3480 (C)

From: Strynar, Mark

Sent: Thursday, July 06, 2017 4:09 PM

To: Medina-Vera, Myriam <Medina-Vera.Myriam@epa.gov>; Buckley, Timothy <Buckley.Timothy@epa.gov>

Cc: McCord, James < mccord.james@epa.gov >

Subject: FW: Sampling

FYI,

I just got off of a call with Chris Johnson. It seems the NCDEQ people would like to do one more round of sampling per a request from Chemours. It seems that in the Week one sampling they were surprised by the high results. That would mean a week 4 sampling excursion mid to late next week at both Fayetteville and Wilmington locations. I told him we could handle the capacity but I would be away and those results may be delayed. I think James can handle it but I wanted to let you know. I don't see any reason why we cannot do these samples. It is still below the 50 we agreed we could do. I think we can still hit the deadline for the Week1-3 samples. Not sure about week number 4.

Thus I need to give Chris QC samples for Test America and for our efforts when he arrives tomorrow.

I will come to chat with you.

Mark

From: Johnson, Chris [mailto:chris.johnson@ncdenr.gov]

Sent: Thursday, July 06, 2017 3:02 PM
To: Strynar, Mark <<u>Strynar.Mark@epa.gov</u>>

Subject: Sampling

Mark, I just finished a call with Linda Culpepper and the Supervisors of the Fayetteville and Wilmington regional offices. We want to do one more sampling event for the Fayetteville sites (three sites) next week on Wednesday or Thursday. This is to get another result for the upstream sample since it was only done in weeks 2 and 3. Is that doable from your end? If so, we would need another set of the QC samples if you so desire. Samples will also be going to TestAmerica once again, so we would need a QC set for them as well. We have additional sample containers available from the set you provided, so we won't need those this time. Let me know if all this is acceptable for your laboratory. Thanks.

#### Chris Johnson

Environmental Program Supervisor Water Sciences Section / Organic Chemistry Branch

North Carolina Department of Environmental Quality Division of Water Resources

919-733-3908 office

4405 Reedy Creek Road Raleigh, NC 27607

From:

Buckley, Timothy

Sent: To:

Thursday, July 06, 2017 4:19 PM Strynar, Mark; Medina-Vera, Myriam

Cc:

McCord, James

Subject:

RE: Sampling

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